

SEQUENCE LISTING

<110> Birger Sorensen

<120> HIV Peptides, antigens, vaccine compositions, immunoassay kit and a method of detecting antibodies induced by HIV.

<130> 2833.4001LO

<140> TBA

<141> 2003-09-11

<150> US 09/674,674

<151> 2001-07-25

<160> 49

<170> PatentIn Ver. 3.1

<210> 1

<211> 20

<212> PRT

<213> artificial sequence

<220>

<223> synthetic peptide

<220>

<221> VARIANT

<222> 1

<223> Xaa in position 1 is Lys or Arg

<220>

<221> VARIANT

<222> 2

<223> Xaa in position 2 is Ala, Gly, Ser or Arg

<220>

<221> VARIANT

<222> 3

<223> Xaa in position 3 is Leu or Met

<220>

<221> VARIANT

<222> 4

<223> Xaa in position 4 is Gly or Arg

<220>

<221> VARIANT

<222> 5

<223> Xaa in position 5 is Pro, Thr, Val, Ser, Gln or Ala

<220>

<221> VARIANT

<222> 6

<223> Xaa in position 6 is Gly, Ala, Lys, Arg, Gln or Glu

<220>

<221> VARIANT  
<222> 8  
<223> Xaa in position 8 is Thr or Ser

<220>

<221> VARIANT  
<222> 9  
<223> Xaa in position 9 is Leu or Ile

<220>

<221> VARIANT  
<222> 14  
<223> Xaa in position 14 is Thr, Ser or Val

<220>

<221> VARIANT  
<222> 15  
<223> Xaa in position 15 is Ala or Ser

<220>

<221> VARIANT  
<222> 16  
<223> Xaa in position 16 is Cys or Ser

<220>

<221> DISULFID  
<222> 16  
<223> disulfide, optional

<220>

<221> VARIANT  
<222> 17  
<223> Xaa in position 17 is Gln or Leu

<220>

<221> VARIANT  
<222> 18  
<223> Xaa in position 18 is Gly, Glu or Arg

<220>

<221> VARIANT  
<222> 20  
<223> Xaa in position 20 is Gly or Arg

<400> 1  
Xaa Xaa Xaa Xaa Xaa Xaa Ala Xaa Xaa Gln Thr Pro Trp Xaa Xaa Xaa  
1 5 10 15

Xaa Xaa Val Xaa  
20

<210> 2  
<211> 20

<212> PRT  
<213> artificial sequence

<220>

<223> synthetic peptide

<220>

<221> DISULFID  
<222> 16  
<223> disulfide, optional, can form a homodimer with another SEQ ID NO 2 or a heterodimer with SEQ ID NO 5

<400> 2  
Lys Ala Leu Gly Pro Gly Ala Thr Leu Gln Thr Pro Trp Thr Ala Cys  
1 5 10 15

Gln Gly Val Gly  
20

<210> 3  
<211> 20  
<212> PRT  
<213> artificial sequence

<220>

<223> synthetic peptide

<400> 3  
Arg Ala Leu Gly Pro Ala Ala Thr Leu Gln Thr Pro Trp Thr Ala Ser  
1 5 10 15

Leu Gly Val Gly  
20

<210> 4  
<211> 25  
<212> PRT  
<213> artificial sequence

<220>

<223> synthetic peptide

<220>

<221> VARIANT  
<222> 1  
<223> Xaa in position 1 is Arg, Lys, Asp or missing

<220>

<221> VARIANT  
<222> 2  
<223> Xaa in position 2 is Trp, Gly, Lys or Arg

<220>

<221> VARIANT  
<222> 3

<223> Xaa in position 3 is Ile, Leu, Val or Met

<220>

<221> VARIANT

<222> 4

<223> Xaa in position 4 is Ile, Val or Leu

<220>

<221> VARIANT

<222> 5

<223> Xaa in position 5 is Leu, Met, Val or Pro

<220>

<221> VARIANT

<222> 12

<223> Xaa in position 12 is Gly or missing

<220>

<221> VARIANT

<222> 13

<223> Xaa in position 13 is Gly or missing

<220>

<221> VARIANT

<222> 14

<223> Xaa in position 14 is Gly or missing

<220>

<221> VARIANT

<222> 15

<223> Xaa in position 15 is Arg or Lys

<220>

<221> VARIANT

<222> 16

<223> Xaa in position 16 is Met or Leu

<220>

<221> VARIANT

<222> 18

<223> Xaa in position 18 is Ser, Cys or Gln

<220>

<221> VARIANT

<222> 20

<223> Xaa in position 20 is Thr, Val, Ile, Ser or Ala

<220>

<221> VARIANT

<222> 21

<223> Xaa in position 21 is Ser, Gly or Thr

<220>

<221> VARIANT  
<222> 24  
<223> Xaa in position 24 is Asp, Glu, Cys or Gly

<220>

<221> DISULFID  
<222> 24  
<223> disulfide, optional

<220>

<221> VARIANT  
<222> 25  
<223> Xaa in position 25 is Gly or missing

<400> 4  
Xaa Xaa Xaa Xaa Xaa Gly Leu Asn Pro Leu Val Xaa Xaa Xaa Xaa Xaa  
1 5 10 15

Tyr Xaa Pro Xaa Xaa Ile Leu Xaa Xaa  
20 25

<210> 5  
<211> 24  
<212> PRT  
<213> artificial sequence

<220>

<223> synthetic peptide

<220>

<221> DISULFID  
<222> 23  
<223> disulfide, optional, can form homodimer with another SEQ ID NO 5 or a heterodimer with SEQ ID NO 2

<400> 5  
Trp Ile Ile Pro Gly Leu Asn Pro Leu Val Gly Gly Gly Lys Leu Tyr  
1 5 10 15

Ser Pro Thr Ser Ile Leu Cys Gly  
20

<210> 6  
<211> 24  
<212> PRT  
<213> artificial sequence

<220>

<223> synthetic peptide

<400> 6  
Arg Trp Leu Leu Leu Gly Leu Asn Pro Leu Val Gly Gly Arg Leu  
1 5 10 15

Tyr Ser Pro Thr Ser Ile Leu Gly

20

<210> 7  
<211> 23  
<212> PRT  
<213> artificial sequence

<220>

<223> synthetic peptide

<400> 7  
Lys Ile Leu Leu Gly Leu Asn Pro Leu Val Gly Gly Gly Arg Leu Tyr  
1 5 10 15

Ser Pro Thr Ser Ile Leu Gly  
20

<210> 8  
<211> 23  
<212> PRT  
<213> artificial sequence

<220>

<223> synthetic peptide

<400> 8  
Arg Leu Leu Leu Gly Leu Asn Pro Leu Val Gly Gly Gly Arg Leu Tyr  
1 5 10 15

Ser Pro Thr Thr Ile Leu Gly  
20

<210> 9  
<211> 27  
<212> PRT  
<213> artificial sequence

<220>

<223> synthetic peptide

<220>

<221> VARIANT  
<222> 1  
<223> xaa in position 1 is Asn, Ser, Gly, His, Ala, Pro, Arg or missing

<220>

<221> VARIANT  
<222> 2  
<223> xaa in position 2 is Asn, Ala or Lys

<220>

<221> VARIANT  
<222> 3  
<223> xaa in position 3 is Pro, Gln, Gly, Ile or Leu

<220>

<221> VARIANT

<222> 7  
<223> Xaa in position 7 is Val or Ala

<220>

<221> VARIANT  
<222> 8  
<223> Xaa in position 8 is Gly or Lys

<220>

<221> VARIANT  
<222> 9  
<223> Xaa in position 9 is Glu, Asp, Lys, Phe or Thr

<220>

<221> VARIANT  
<222> 10  
<223> Xaa in position 10 is Ile, Met, Val or Leu

<220>

<221> VARIANT  
<222> 11  
<223> Xaa in position 11 is Tyr, Leu or missing

<220>

<221> VARIANT  
<222> 12  
<223> Xaa in position 12 is Ser or missing

<220>

<221> VARIANT  
<222> 14  
<223> Xaa in position 14 is Gly or missing

<220>

<221> VARIANT  
<222> 15  
<223> Xaa in position 15 is Gly or missing

<220>

<221> VARIANT  
<222> 16  
<223> Xaa in position 16 is Arg or missing

<220>

<221> VARIANT  
<222> 17  
<223> Xaa in position 17 is Asp, Arg, Trp, Ala or missing

<220>

<221> VARIANT  
<222> 18  
<223> Xaa in position 18 is Ile or missing

<220>

<221> VARIANT  
<222> 19  
<223> Xaa in position 19 is Tyr or missing

<220>

<221> VARIANT  
<222> 20  
<223> Xaa in position 20 is Lys or Arg

<220>

<221> VARIANT  
<222> 21  
<223> Xaa in position 21 is Arg, Lys or Asp

<220>

<221> VARIANT  
<222> 22  
<223> Xaa in position 22 is Trp or Gly

<220>

<221> VARIANT  
<222> 23  
<223> Xaa in position 23 is Ile, Met, Val, Gln or Ala

<220>

<221> VARIANT  
<222> 24  
<223> Xaa in position 24 is Ile, Val or Ala

<220>

<221> VARIANT  
<222> 25  
<223> Xaa in position 25 is Leu, Met or Val

<220>

<221> VARIANT  
<222> 26  
<223> Xaa in position 26 is Gly or Cys

<220>

<221> VARIANT  
<222> 27  
<223> Xaa in position 27 is Leu or missing

<400> 9  
Xaa Xaa Xaa Pro Ile Pro Xaa Xaa Xaa Xaa Xaa Xaa Gly Xaa Xaa Xaa  
1 5 10 15

Xaa  
20 25

<210> 10  
<211> 25  
<212> PRT

<213> artificial sequence

<220>

<223> synthetic peptide

<220>

<221> DISULFID

<222> 24

<223> disulfide, optional

<400> 10

Arg Asn Ile Pro Ile Pro Val Gly Asp Ile Tyr Gly Gly Gly Asp Ile  
1 5 10 15

Tyr Lys Arg Trp Gln Ala Leu Cys Leu  
20 25

<210> 11

<211> 26

<212> PRT

<213> artificial sequence

<220>

<223> synthetic peptide

<400> 11

Arg Ala Ile Pro Ile Pro Ala Gly Thr Leu Leu Ser Gly Gly Gly Arg  
1 5 10 15

Ala Ile Tyr Lys Arg Trp Ala Ile Leu Gly  
20 25

<210> 12

<211> 23

<212> PRT

<213> artificial sequence

<220>

<223> synthetic peptide

<400> 12

Ala Leu Pro Ile Pro Ala Gly Phe Ile Tyr Gly Gly Gly Arg Ile Tyr  
1 5 10 15

Lys Arg Trp Gln Ala Leu Gly  
20

<210> 13

<211> 22

<212> PRT

<213> artificial sequence

<220>

<223> synthetic peptide

<400> 13

Lys Ile Pro Ile Pro Val Gly Phe Ile Gly Gly Gly Trp Ile Tyr Lys  
1 5 10 15

Arg Trp Ala Ile Leu Gly  
20

<210> 14  
<211> 24  
<212> PRT  
<213> artificial sequence

<220>

<223> synthetic peptide

<400> 14  
Lys Ile Pro Ile Pro Val Gly Thr Leu Leu Ser Gly Gly Gly Arg Ile  
1 5 10 15

Tyr Lys Arg Trp Ala Ile Leu Gly  
20

<210> 15  
<211> 31  
<212> PRT  
<213> artificial sequence

<220>

<223> synthetic peptide

<220>

<221> VARIANT  
<222> 1  
<223> Xaa in position 1 is Pro, Lys, Arg or missing

<220>

<221> VARIANT  
<222> 2  
<223> Xaa in position 2 is Glu, Arg, Phe or Lys

<220>

<221> VARIANT  
<222> 5  
<223> Xaa in position 5 is Pro or Thr

<220>

<221> VARIANT  
<222> 6  
<223> Xaa in position 6 is Met, Thr or Nle

<220>

<221> VARIANT  
<222> 7  
<223> Xaa in position 7 is Phe or Leu

<220>

<221> VARIANT  
<222> 8  
<223> Xaa in position 8 is Ser, Thr, Ala or Met

<220>

<221> VARIANT

<222> 9

<223> Xaa in position 9 is Ala, Glu or Leu

<220>

<221> VARIANT

<222> 11

<223> Xaa in position 11 is Ser or missing

<220>

<221> VARIANT

<222> 13

<223> Xaa in position 13 is Gly or missing

<220>

<221> VARIANT

<222> 14

<223> Xaa in position 14 is Gly or missing

<220>

<221> VARIANT

<222> 15

<223> Xaa in position 15 is Arg or missing

<220>

<221> VARIANT

<222> 16

<223> Xaa in position 16 is Arg or missing

<220>

<221> VARIANT

<222> 17

<223> Xaa in position 17 is Arg or missing

<220>

<221> VARIANT

<222> 18

<223> Xaa in position 18 is Ala, Arg or missing

<220>

<221> VARIANT

<222> 19

<223> Xaa in position 19 is Ile, Leu or missing

<220>

<221> VARIANT

<222> 20

<223> Xaa in position 20 is Ser, Ala, Leu or missing

<220>

<221> VARIANT

```
<222> 21
<223> Xaa in position 21 is Tyr, Glu or Asp

<220>

<221> VARIANT
<222> 22
<223> Xaa in position 22 is Gly or Asp

<220>

<221> VARIANT
<222> 23
<223> Xaa in position 23 is Ala or Leu

<220>

<221> VARIANT
<222> 24
<223> Xaa in position 24 is Thr, Ile, Val, Leu or Asn

<220>

<221> VARIANT
<222> 25
<223> Xaa in position 25 is Pro, Thr or Ser

<220>

<221> VARIANT
<222> 26
<223> Xaa in position 26 is Tyr, Phe, Nle, His or Gln

<220>

<221> VARIANT
<222> 27
<223> Xaa in position 27 is Asp, Asn, Leu or Ala

<220>

<221> VARIANT
<222> 28
<223> Xaa in position 28 is Leu, Ile, Val or Asn

<220>

<221> VARIANT
<222> 29
<223> Xaa in position 29 is Asn, Tyr, Cys or Gly

<220>

<221> DISULFID
<222> 29
<223> disulfide, optional

<220>

<221> VARIANT
<222> 30
<223> Xaa in position 30 is Thr, Met, Ile, Ala, Val or missing
```

<221> VARIANT  
<222> 31  
<223> xaa in position 31 is Gly or missing

<400> 15  
Xaa Xaa Ile Ile Xaa Xaa Xaa Xaa Xaa Leu Xaa Gly Xaa Xaa Xaa Xaa  
1 5 10 15

Xaa  
20 25 30

<210> 16  
<211> 25  
<212> PRT  
<213> artificial sequence

<220>

<223> synthetic peptide

<220>

<221> VARIANT  
<222> 6  
<223> xaa is Nle

<220>

<221> VARIANT  
<222> 21  
<223> xaa is Nle

<220>

<221> DISULFID  
<222> 24  
<223> disulfide, optional

<400> 16  
Lys Phe Ile Ile Pro Xaa Phe Ser Ala Leu Gly Gly Ala Ile Ser Tyr  
1 5 10 15

Asp Leu Asn Thr Xaa Leu Asn Cys Ile  
20 25

<210> 17  
<211> 28  
<212> PRT  
<213> artificial sequence

<220>

<223> synthetic peptide

<220>

<221> VARIANT  
<222> 6  
<223> xaa is Nle

<220>

<221> DISULFID

<222> 26  
<223> disulfide, optional

<400> 17  
Lys Phe Ile Ile Pro Xaa Phe Ser Ala Leu Ser Gly Gly Gly Ala Ile  
1 5 10 15

Ser Tyr Asp Leu Asn Thr Phe Leu Asn Cys Ile Gly  
20 25

<210> 18  
<211> 27  
<212> PRT  
<213> artificial sequence

<220>

<223> synthetic peptide

<220>

<221> VARIANT  
<222> 6  
<223> Xaa is Nle

<400> 18  
Arg Phe Ile Ile Pro Xaa Phe Thr Ala Leu Ser Gly Gly Arg Arg Ala  
1 5 10 15

Leu Leu Tyr Gly Ala Thr Pro Tyr Ala Ile Gly  
20 25

<210> 19  
<211> 24  
<212> PRT  
<213> artificial sequence

<220>

<223> synthetic peptide

<220>

<221> VARIANT  
<222> 5  
<223> Xaa is Nle

<400> 19  
Lys Ile Ile Pro Xaa Phe Ser Ala Leu Gly Gly Gly Arg Leu Leu Tyr  
1 5 10 15

Gly Ala Thr Pro Tyr Ala Ile Gly  
20

<210> 20  
<211> 25  
<212> PRT  
<213> artificial sequence

<220>

<223> synthetic peptide

<220>

<221> VARIANT  
<222> 5  
<223> Xaa is Nle

<400> 20  
Arg Ile Ile Pro Xaa Phe Thr Ala Leu Ser Gly Gly Gly Arg Leu Leu  
1 5 10 15

Tyr Gly Ala Thr Pro Tyr Ala Ile Gly  
20 25

<210> 21

<400> 21  
000

<210> 22

<400> 22  
000

<210> 23

<400> 23  
000

<210> 24  
<211> 24  
<212> PRT  
<213> artificial sequence

<220>

<223> synthetic peptide

<220>

<221> DISULFID  
<222> 23  
<223> disulfide, optional

<400> 24  
Asn Ile Pro Ile Pro Val Gly Asp Ile Tyr Gly Gly Gly Asp Ile Tyr  
1 5 10 15

Lys Arg Tyr Gln Ala Leu Cys Leu  
20

<210> 25  
<211> 24  
<212> PRT  
<213> artificial sequence

<220>

<223> synthetic peptide

<220>

<221> VARIANT  
<222> 5  
<223> Xaa is Nle

<220>

<221> VARIANT

<222> 20

<223> Xaa is Nle

<220>

<221> DISULFID

<222> 23

<223> disulfide, optional

<400> 25

Trp Ile Ile Pro Xaa Phe Ser Ala Leu Gly Gly Ala Ile Ser Tyr Asp  
1 5 10 15

Leu Asn Thr Xaa Leu Asn Cys Ile  
20

<210> 26

<211> 20

<212> PRT

<213> Homo sapiens

<400> 26

Lys Ala Leu Gly Pro Gly Ala Thr Leu Glu Glu Met Met Thr Ala Cys  
1 5 10 15

Gln Gly Val Gly  
20

<210> 27

<211> 20

<212> PRT

<213> Homo sapiens

<400> 27

Arg Arg Met Arg Thr Lys Ala Ser Ile Lys Asp Met Leu Ser Ser Ser  
1 5 10 15

Gln Arg Val Arg  
20

<210> 28

<211> 20

<212> PRT

<213> Homo sapiens

<400> 28

Lys Gly Leu Gly Val Arg Ala Thr Leu Glu Glu Met Met Val Ala Cys  
1 5 10 15

Gln Gly Val Gly  
20

<210> 29

<211> 20

<212> PRT

<213> Homo sapiens

<400> 29

Lys Ser Leu Gly Ala Ala Ala Thr Leu Glu Glu Met Met Thr Ala Cys  
1 5 10 15

Gln Gly Val Gly  
20

<210> 30  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 30  
Lys Ala Leu Gly Ser Glu Ala Thr Leu Glu Glu Met Met Thr Ala Cys  
1 5 10 15

Gln Gly Val Gly  
20

<210> 31  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 31  
Lys Ala Leu Gly Gln Gln Ala Thr Leu Glu Glu Met Met Thr Ala Cys  
1 5 10 15

Gln Gly Val Gly  
20

<210> 32  
<211> 29  
<212> PRT  
<213> artificial sequence

<220>

<223> synthetic peptide

<220>

<221> DISULFID  
<222> 5  
<223> disulfide

<220>

<221> VARIANT  
<222> 21  
<223> Xaa is 2-aminohexanoic acid

<220>

<221> VARIANT  
<222> 22  
<223> Xaa is 2-aminohexanoic acid

<220>

<221> DISULFID  
<222> 25  
<223> disulfide

<400> 32  
Ala Asn Pro Asp Cys Lys Gln Ile Leu Lys Ser leu Gly Pro Gly Ala  
1 5 10 15

Thr Leu Gln Gln Xaa Xaa Thr Ala Cys Gln Gly Val Gly  
20 25

<210> 33

<211> 18

<212> PRT

<213> artificial sequence

<220>

<223> synthetic peptide

<220>

<221> DISULFID

<222> 7

<223> disulfide

<220>

<221> VARIANT

<222> 11

<223> Xaa is 2-aminohexanoic acid

<220>

<221> DISULFID

<222> 14

<223> disulfide

<400> 33

Leu Ile Trp Gly Ala Thr Cys Gln Glu His Xaa Thr Ala Cys Gln Gly  
1 5 10 15

Val Gly

<210> 34

<211> 21

<212> PRT

<213> Homo sapiens

<400> 34

Arg Trp Ile Ile Leu Gly Leu Asn Lys Ile Val Arg Met Tyr Ser Pro  
1 5 10 15

Thr Ser Ile Leu Asp

20

<210> 35

<211> 21

<212> PRT

<213> Homo sapiens

<400> 35

Lys Gly Val Val Met Gly Leu Asn Lys Met Val Lys Met Tyr Cys Pro  
1 5 10 15

Val Gly Ile Leu Glu

20

<210> 36

<211> 21

<212> PRT

<213> Homo sapiens

<400> 36

Lys Trp Met Ile Val Gly Leu Asn Lys Val Val Arg Met Tyr Gln Pro  
1 5 10 15

Ile Ser Ile Leu Gly  
20

<210> 37

<211> 21

<212> PRT

<213> Homo sapiens

<400> 37

Arg Trp Ile Ile Leu Gly Leu Asn Lys Ile Val Arg Met Tyr Ser Pro  
1 5 10 15

Ser Ser Ile Leu Asp  
20

<210> 38

<211> 21

<212> PRT

<213> Homo sapiens

<400> 38

Arg Trp Ile Ile Leu Gly Leu Asn Lys Ile Val Arg Met Tyr Ser Pro  
1 5 10 15

Ala Ser Ile Leu Asp  
20

<210> 39

<211> 19

<212> PRT

<213> Homo sapiens

<400> 39

Asn Asn Pro Pro Ile Pro Val Gly Glu Ile Tyr Lys Arg Trp Ile Ile  
1 5 10 15

Leu Gly Leu

<210> 40

<211> 19

<212> PRT

<213> Homo sapiens

<400> 40

Ser Asn Gln Ala Val Pro Val Lys Asp Met Leu Arg Lys Gly Met Val  
1 5 10 15

Met Gly Leu

<210> 41

<211> 19

<212> PRT

<213> Homo sapiens

<400> 41

Gly Asn Gly Ser Asn Pro Val Gly Lys Val Tyr Lys Asp Trp Val Ile  
1 5 10 15

Val Gly Leu

<210> 42

<211> 19

<212> PRT

<213> Homo sapiens

<400> 42

His Asn Pro Gly Thr Pro Val Gly Glu Ile Tyr Lys Arg Trp Ile Ile  
1 5 10 15

Leu Gly Leu

<210> 43

<211> 19

<212> PRT

<213> Homo sapiens

<400> 43

Ala Asn Pro Pro Ile Pro Val Gly Glu Ile Tyr Lys Arg Trp Ile Ile  
1 5 10 15

Leu Gly Leu

<210> 44

<211> 19

<212> PRT

<213> Homo sapiens

<400> 44

Pro Asn Pro Pro Ile Pro Val Gly Glu Ile Tyr Lys Arg Trp Ile Ile  
1 5 10 15

Leu Gly Leu

<210> 45

<211> 21

<212> PRT

<213> Homo sapiens

<400> 45

Pro Glu Val Ile Pro Met Phe Ser Ala Leu Ser Glu Gly Ala Thr Pro  
1 5 10 15

Gln Asp Leu Asn Thr  
20

<210> 46

<211> 21

<212> PRT

<213> Homo sapiens

<400> 46

Pro Arg Ile Thr Thr Thr Leu Thr Glu Leu Ala Asp Gly Ala Ile Ser  
1 5 10 15

Tyr Asn Ile Tyr Met  
20

<210> 47

<211> 21

<212> PRT

<213> Homo sapiens

<400> 47  
Pro Glu Leu Asn Pro Met Phe Ala Leu Leu Ser Glu Gly Ala Val Pro  
1 5 10 15  
His Asp Val Asn Ile  
20

<210> 48  
<211> 21  
<212> PRT  
<213> Homo sapiens

<400> 48  
Pro Glu Val Ile Pro Met Phe Met Ala Leu Ser Glu Gly Ala Leu Pro  
1 5 10 15  
Gln Asp Leu Asn Ala  
20

<210> 49  
<211> 21  
<212> PRT  
<213> Homo sapiens

<400> 49  
Pro Glu Val Ile Pro Met Phe Ser Ala Leu Ser Glu Gly Ala Thr Pro  
1 5 10 15  
Gln Asp Leu Asn Val  
20